

Robin Carnahan
Secretary of State
Administrative Rules Division

RULE TRANSMITTAL

Administrative Rules Stamp

RECEIVED

AUG 01 2013

SECRETARY OF STATE
ADMINISTRATIVE RULES

FILED
August 2, 2013
Data Center
Missouri Public
Service Commission

COPY

Rule Number 4 CSR 240-18.010

Use a "SEPARATE" rule transmittal sheet for EACH individual rulemaking.

Name of person to call with questions about this rule:

Content Morris Woodruff Phone 573-751-2849 FAX 573-526-6010

Email address morris.woodruff@psc.mo.gov

Data

Entry Chris Koenigsfeld Phone 573-751-4256 FAX 573-526-6010

Email address christine.koenigsfeld@psc.mo.gov

Interagency mailing address Public Service Commission, 9th Fl, Gov. Ofc Bldg, JC, MO

TYPE OF RULEMAKING ACTION TO BE TAKEN

☐ Emergency rulemaking, include effective date

☒ Proposed Rulemaking

☐ Withdrawal ☐ Rule Action Notice ☐ In Addition ☐ Rule Under Consideration

☐ Order of Rulemaking

Effective Date for the Order _____

☐ Statutory 30 days OR Specific date _____

Does the Order of Rulemaking contain changes to the rule text? ☐ NO

☐ YES—LIST THE SECTIONS WITH CHANGES, including any deleted rule text:

Small Business Regulatory
Fairness Board (DED) Stamp
SMALL BUSINESS
REGULATORY FAIRNESS BOARD

AUG 01 2013

RECEIVED

JCAR Stamp

JOINT COMMITTEE ON

AUG 1 2013

ADMINISTRATIVE RULES

Robin Carnahan

Secretary of State
Administrative Rules Division

RULE TRANSMITTAL

Administrative Rules Stamp

Rule Number 4 CSR 240-18.010

Use a "SEPARATE" rule transmittal sheet for EACH individual rulemaking.

Name of person to call with questions about this rule:

Content Morris Woodruff Phone 573-751-2849 FAX 573-526-6010

Email address morris.woodruff@psc.mo.gov

Data

Entry Chris Koenigsfeld Phone 573-751-4256 FAX 573-526-6010

Email address christine.koenigsfeld@psc.mo.gov

Interagency mailing address Public Service Commission, 9th Fl, Gov.Ofc Bldg, JC, MO

TYPE OF RULEMAKING ACTION TO BE TAKEN

☐ Emergency rulemaking, include effective date

☒ Proposed Rulemaking

☐ Withdrawal ☐ Rule Action Notice ☐ In Addition ☐ Rule Under Consideration

☐ Order of Rulemaking

Effective Date for the Order _____

☐ Statutory 30 days OR Specific date _____

Does the Order of Rulemaking contain changes to the rule text? ☐ NO

☐ YES—LIST THE SECTIONS WITH CHANGES, including any deleted rule text:

Small Business Regulatory
Fairness Board (DED) Stamp

JCAR Stamp

JOINT COMMITTEE ON

AUG 1 2013

ADMINISTRATIVE RULES



Commissioners

ROBERT S. KENNEY
Chairman

TERRY M. JARRETT

STEPHEN M. STOLL

WILLIAM P. KENNEY

Missouri Public Service Commission

POST OFFICE BOX 360
JEFFERSON CITY, MISSOURI 65102
573-751-3234
573-751-1847 (Fax Number)
<http://www.psc.mo.gov>

JOSHUA HARDEN
General Counsel

MORRIS WOODRUFF
Secretary

WESS A. HENDERSON
Director of Administration
and Regulatory Policy

CHERLYN D. VOSS
Director of Regulatory Review

KEVIN A. THOMPSON
Chief Staff Counsel

August 1, 2013

Jason Kander
Secretary of State
Administrative Rules Division
600 West Main Street
Jefferson City, Missouri 65101

Re: 4 CSR 240-18.010 Safety Standards for Electrical Corporations, Telecommunications
Companies and Rural Electric Cooperatives

Dear Secretary Kander,

CERTIFICATION OF ADMINISTRATIVE RULE

I do hereby certify that the attached is an accurate and complete copy of the proposed rulemaking lawfully submitted by the Missouri Public Service Commission.

The Public Service Commission has determined and hereby certifies that this proposed rulemaking will not have an economic impact on small businesses. The Public Service Commission further certifies that it has conducted an analysis of whether there has been a taking of real property pursuant to section 536.017, RSMo 2000, that the proposed rulemaking does not constitute a taking of real property under relevant state and federal law, and that the proposed rulemaking conforms to the requirements of 1.310, RSMo Supp. 2012, regarding user fees.

The Public Service Commission has determined and hereby also certifies that this proposed rulemaking complies with the small business requirements of 1.310, RSMo Supp. 2012, in that it does not have an adverse impact on small businesses consisting of fewer than fifty full or part-time employees or it is necessary to protect the life, health, or safety of the public, or that this rulemaking complies with 1.310, RSMo Supp 2012, by exempting any small business consisting of fewer than fifty full or part-time employees from its coverage, by implementing a federal mandate, or by implementing a federal program administered by the state or an act of the general assembly.

Woodruff
August 1, 2013
Certification of Administrative Rule

Statutory Authority: sections 386.310 and 394.160, RSMo 2000

If there are any questions regarding the content of this proposed rulemaking, please contact:

Morris L. Woodruff, Chief Regulatory Law Judge
Missouri Public Service Commission
200 Madison Street
P.O. Box 360
Jefferson City, MO 65102
(573) 751-2849
morris.woodruff@psc.mo.gov

A handwritten signature in black ink, reading "Morris L. Woodruff". The signature is stylized with a large, sweeping "M" and a long, horizontal stroke at the end.

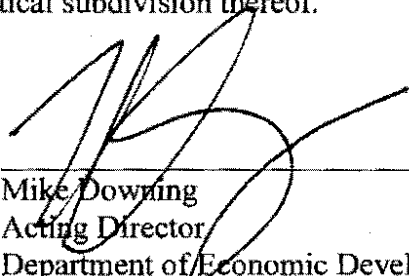
Morris L. Woodruff
Chief Regulatory Law Judge

Enclosures

**AFFIDAVIT
PUBLIC COST**


**STATE OF MISSOURI)
)
COUNTY OF COLE)**

I, Mike Downing, Acting Director of the Department of Economic Development, first being duly sworn, on my oath, state that it is my opinion that the cost of proposed rule, 4 CSR 240-18.010, is less than five hundred dollars in the aggregate to this agency, any other agency of state government or any political subdivision thereof.

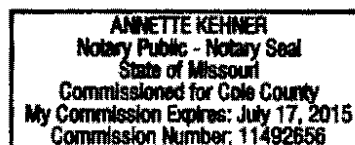


Mike Downing
Acting Director
Department of Economic Development

Subscribed and sworn to before me this 15th day of July, 2013, I am commissioned as a notary public within the County of Cole, State of Missouri, and my commission expires on 17 July 2015.



Notary Public



RECEIVED

AUG 01 2013

SECRETARY OF STATE
ADMINISTRATIVE RULES

Title 4—DEPARTMENT OF ECONOMIC DEVELOPMENT

Division 240—Public Service Commission

Chapter 18—Safety Standards

PROPOSED AMENDMENT

COPY

4 CSR 240-18.010 Safety Standards for Electrical Corporations, Telecommunications Companies and Rural Electric Cooperatives. The Commission is amending the purpose of the rule and section (1).

Purpose: This amendment changes the edition of the National Electrical Safety Code that the Public Service Commission adopts for the minimum safety standards applicable to electrical corporations, telecommunications companies and rural electric cooperatives, and clarifies that the new standards apply only to new installations and extensions.

PURPOSE: This rule prescribes minimum safety standards relating to the operation of electric utilities, telecommunications companies, and rural electric cooperatives. Adoption of this rule will [*not only*] inform the utilities of the minimum safety standards required by the commission and will be of assistance to the commission staff in carrying out its assigned duties.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) The minimum safety standards relating to the operation of electrical corporations, telecommunications companies, and rural electric cooperatives are Parts 1, 2, and 3 and Sections 1, 2, and 9 of the *National Electrical Safety Code* (NESC); [2007] **2012** Edition as approved by the American National Standards Institute on [June 16, 2006] **August 1, 2011**, as modified by Errata thereto issued on [October 5, 2006 and May 14, 2007] **February 6, 2012**, and published by the Institute of Electrical and Electronics Engineers, Inc., 3 Park Avenue, New York, NY 10016-5997. The NESC is composed of four (4) different parts and four (4) sections, each of which pertain to different aspects of the electric and telecommunications industries. Part 1 specifies rules for the installation and maintenance of equipment normally found in electric generating plants and substations. Part 2 pertains to safety rules for overhead electric and communication lines. Part 3 contains safety rules for underground electric and communication lines. Section 1 is an introduction to the NESC, Section 2 defines special terms, and Section 9 requires certain grounding methods for electric and communications facilities. The full text of this material is available at the Energy Department of the Public Service Commission, Suite 700, 200 Madison, Jefferson City, Missouri. This rule does not incorporate any subsequent amendments or additions.

JOINT COMMITTEE ON
AUG 1 2013
ADMINISTRATIVE RULES

(2) Electrical corporations, telecommunications companies, and rural electric cooperatives subject to regulation by this commission pursuant to Chapters 386, 392–394, RSMo 2000 shall comply with the safety standards established by this rule for new installations and extensions as described in the NESC.

(3) Incident reporting requirements for electrical corporations and rural electric cooperatives are found in 4 CSR 240-3.190(4).

(4) Those who excavate near underground facilities or conduct activities within ten feet (10') of overhead power lines are required to notify area utilities prior to engaging in such action, pursuant to the Underground Facility Safety and Damage Prevention Act, section 319.010 et seq., RSMo 2000, and the Overhead Power Line Safety Act, section 319.075 et seq., RSMo 2000.

*AUTHORITY: sections 386.310 and 394.160, RSMo 2000. * Original rule filed March 15, 1978, effective Oct. 2, 1978. Amended: Filed April 8, 1981, effective Oct. 15, 1981. Amended: Filed Feb. 9, 1984, effective June 15, 1984. Amended: Filed June 12, 1987, effective Sept. 15, 1987. Amended: Filed Jan. 5, 1990, effective April 13, 1990. Amended: Filed March 23, 1993, effective Oct. 10, 1993. Amended: Filed Aug. 27, 1999, effective Feb. 29, 2000. Amended: Filed Oct. 14, 2003, effective April 30, 2004. Amended: Filed May 2, 2008, effective Nov. 30, 2008. Amended: Filed Month/Day, 2013, effective Month/Day, 2013*

**Original authority: 386.310, RSMo 1939, amended 1979, 1989, 1996 and 394.160, RSMo 1939, amended 1979.*

PUBLIC COST: *This proposed rule will not cost state agencies or political subdivisions in excess of \$500.00 in total.*

PRIVATE COST: *This proposed rule will cost private entities in excess of \$500.00 in total.*

NOTICE TO SUBMIT COMMENTS AND NOTICE OF PUBLIC HEARING: *Anyone may file comments in support of or in opposition to this proposed rule with the Missouri Public Service Commission, Morris L. Woodruff, Secretary of the Commission, PO Box 360, Jefferson City, MO 65102. To be considered, comments must be received at the Commission's offices on or before October 3, 2013, and should include a reference to Commission Case No. EX-2012-0332. If comments are submitted via a paper filing, an original and eight (8) copies of the comments are required. Comments may also be submitted via a filing using the Commission's electronic filing and information system at <http://www.psc.mo.gov/efis.asp>. A public hearing regarding this proposed rule is scheduled for October 4, 2013, at 10:00 a.m., in Room 305 of the Governor Office Building, 200 Madison St., Jefferson City, Missouri. Interested persons may appear at this hearing to submit additional comments and/or testimony in support of or in opposition to this proposed rule, and may be asked to respond to Commission questions. Any persons with special needs as addressed by the Americans with Disabilities Act should contact the Missouri Public Service Commission at least ten (10) days prior to the hearing at one (1) of the following numbers: Consumer Services Hotline 1-800-392-4211 or TDD Hotline 1-800-829-7541.*

Small Business Regulatory Fairness Board

Small Business Impact Statement

Date: July 24, 2012

Rule Number: 4 CSR 240-18.010

Name of Agency Preparing Statement: Missouri Public Service Commission

Name of Person Preparing Statement: Alan Bax

Phone Number: 573-526-1444 **Email:** alan.bax@psc.mo.gov

Name of Person Approving Statement: Natelle Dietrich

Please describe the methods your agency considered or used to reduce the impact on small businesses *(examples: consolidation, simplification, differing compliance, differing reporting requirements, less stringent deadlines, performance rather than design standards, exemption, or any other mitigating technique).*

This amendment changes the edition of the National Electrical Safety Code that the commission adopts for the minimum safety standards applicable to electrical corporations, telecommunication companies and rural electric cooperatives. There is no impact on small businesses.

Please explain how your agency has involved small businesses in the development of the proposed rule.

N/A – The proposed amendment only updates the version of applicable federal standards. Small businesses that are utility companies and directly affected would have been involved in the initial rulemaking when the codes were adopted. In addition, some small utility businesses indicated the changes were negligible and others have the opportunity to request automatic waivers of the requirements.

Please list the probable monetary costs and benefits to your agency and any other agencies affected. Please include the estimated total amount your agency expects to collect from additionally imposed fees and how the moneys will be used.

None.

Please describe small businesses that will be required to comply with the proposed rule and how they may be adversely affected.

Small business utility companies will be required to comply with the rules, but are not expected to be adversely affected. They are already required to comply with the standards and the amendment simply updates the version applicable for compliance. Some small businesses indicate compliance will be negligible and others have the opportunity to request automatic waivers of the requirements.

Please list direct and indirect costs (in dollars amounts) associated with compliance.

N/A

Please list types of business that will be directly affected by, bear the cost of, or directly benefit from the proposed rule.

Electrical corporations, telecommunications companies, and rural electric cooperatives.

Does the proposed rule include provisions that are more stringent than those mandated by comparable or related federal, state, or county standards?

Yes___ No X___

If yes, please explain the reason for imposing a more stringent standard.

For further guidance in the completion of this statement, please see §536.300, RSMo.

FISCAL NOTE PRIVATE COST

- I. Department Title:**
Division Title:
Chapter Title:

Rule Number and Title:	4 CSR 240-18.010 Safety Standards for Electrical Corporations, Telecommunications Companies and Rural Electric Cooperatives
Type of Rulemaking:	Proposed Amendment

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
4	Investor Owned Utilities	
	Ameren Missouri	1. \$381,600 Annually 2. Negligible 3. Negligible 4. \$2.3M over 2 years
	Empire District Electric Company	\$30,000 to \$190,000.00, annually
	Kansas City Power & Light and Kansas City Power & Light Greater Missouri Operations, combined	\$50,000.00 annually

II. WORKSHEET

Ameren Missouri:

- 1. Guy Insulator Placement** – Rule 215C4 regarding use of insulators in down guys and span guys may have a significant cost impact. The revised rule may require guy insulators to be daisy chained from pole attachment to below the lowest Ameren conductor. On May 1, 2012, Distribution Standards submitted a request for interpretation to the NESC Interpretations Committee to clarify the intent of this rule change. Typical response time is 1 year
- 2. Wood Pole Class Design Selection** – For poles longer in length than 55 feet, Rules 261A2a and 261A2b were revised to require evaluation of all applied loading moments on the structure (conductor attachment points) instead of just the resultant ground-line loading moment. This could potentially lead to use of higher class poles or shorter span lengths. However, Distribution Standards believes our current use of Class 1 poles as a minimum for subtransmission construction will negate the impact of these rule changes. Also, these rule changes will not typically apply to 15kV and below structures due to use of poles shorter than 55 feet in length.

3. **Conductor Design Tension Limits** – Rule 261H was revised regarding the 35% Initial Unloaded Tension and 25% Final Unloaded Tension limits. This rule change now requires these conductor design tension limits to be evaluated at 0° F instead of 60° F. This will have no impact on our standard distribution construction (span lengths 300 feet or less). Longer spans may require taller poles due to the reduced tensions and greater sags that this rule change imposes on the longer spans.
4. **Protective Measures for ARC Exposure** – Table 410-1 was added to cover required rating of clothing for worker exposure to voltages 1 kV and less. This will have a significant cost impact to Ameren for work activity on 480V equipment.

Empire District Electric Company:

See Attached.

Kansas City Power & Light and Kansas City Power & Light Greater Missouri Operations:

N/A

IV. ASSUMPTIONS

Ameren Missouri:

1. **Guy Insulator Placement** - If the daisy chaining of guy insulators is required, the cost increase to Ameren is estimated to approach **\$381,600 per year**. This is based on a material cost difference of \$53/guy wire with 7200 guy wires installed per year in Missouri.
2. **Wood Pole Class Design Selection** - The overall material cost impact will be negligible.
3. **Conductor Design Tension Limits** - The overall cost impact to Ameren should be negligible.
4. **Protective Measures for ARC Exposure**- Ameren is proposing to replace 66 480V network protectors over a two year time frame. **Total cost is estimated at \$2.3M for materials and labor to accomplish this.**

Empire District Electric Company:

See Attached.

Kansas City Power & Light and Kansas City Power & Light Greater Missouri Operations:

N/A

Loadings for Grades B and C Section 25

The alternate (grandfathered) method of applying load factors to poles is no longer permitted in this edition.

No net financial impact to EDE.

Strength Requirements Section 26

Wood structures of total length 60 feet and greater shall be designed to withstand the appropriate factored loads at the point of maximum stress, not at the groundline. Single composite crossarms equivalent or greater in strength may be substituted for double wood crossarms.

This will have considerable impact to EDE. The analysis of poles will be more time consuming, and heavier class poles will be required. Estimated impact is approximately \$60,000 per year.

Line Insulation Section 27

Guy insulators must have a dry flashover rating at least twice that of the nominal voltage between conductors of the guyed circuit, and must be UV protected.

This will have an impact on EDE, as manufacturers currently do not publish electrical ratings for the guy strain insulators, and more guy insulators will be required. Estimate of one additional insulator per anchor guy would cost approximately \$100,000.00 per year.

Work Rules Part 4

The requirements for arc flash personal protective equipment are extended to voltages down to 50V. The table for minimum approach distances has been simplified.

This will have an impact on EDE, as Arc Flash Protective equipment will need to be worn in additional work conditions. Although we currently provide arc flash apparel, there is a cost to Empire significantly greater than the \$500 threshold to meet requirements of latest version of the NESC Part 4; Work Rules. The purchase of remote equipment to provide employee protection is significant. In addition, other significant costs for PPE was needed for certain job tasks that apply to Part 4; Work Rules as well. As well, the time and labor involved in analyzing specific tasks is consuming.

What we had previously provided for typical overhead & underground job tasks was sufficient for Part 4; Work Rules. Estimated cost is \$30,000 initially with ongoing replacement costs.

Assumptions of Empire District Electric Company

NESC 2012 Changes and their Financial Impact.

Scope and Purpose section 010 and 011

Language and illustrations added clarify the purpose of the NESC, and the line of demarcation between facilities covered by the NESC and NEC.

No net financial impact to EDE.

Grounding Section 9

Changes were made to the definition of effectively grounded, and items required to be grounded thus must meet the new definition.

The distance between multiple driven ground rods is now specified, as well as some requirements for guarding of grounding conductors where required. The conditions required to count a direct embedded steel pole as a ground are defined.

No net financial impact to EDE.

Substations Section 11

Changes modified the clearance to live parts guarded by an impenetrable fence. Rules regarding storage of materials in the substation, lighting levels, and necessity of fire extinguishing equipment were addressed.

No net financial impact to EDE.

General Requirements Overhead Lines section 21

Records of inspection of facilities must be kept until defects are remedied. Guy wires must be either grounded or insulated, and the insulators placed to limit the likelihood of conducting electricity between other conductors or equipment installed on the structure. Physical protection or guarding shall be provided for structures in parking lots. Readily climbable structures adjacent to traveled ways shall be equipped with barriers to inhibit climbing or posted with appropriate safety signs. Climbing steps shall begin at least 8 ft above ground. Guys in parking areas shall be either protected from vehicle damage or clearly marked. No Attachment or decoration shall be attached to any structure without permission of the owner, and it must not create a code violation.

Clearances Section 23

Added a climate zone for “warm Islands”, defined the communication space more clearly, and specified clearances to guys are to be based on maximum operating voltage, not nominal.

No net financial impact to EDE.

Grades of Construction Section 24

Communication conductors are required to meet the same grade of construction as supply conductors on the same pole.

No net financial impact to EDE.